

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Box 1450 Alexandria, Viginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/954,886	09/18/2001	Sanket S. Amberkar	DE3-0173/DP-302828	8234	
7:	590 05/09/2003				
EDMUND P. ANDERSON DELPHI TECHNOLOGIES, INC. Legal Staff Mail Code: 480-414-420 P.O. Box 5052 Troy, MI 48007-5052		EXAMINER			
			BROADHEA	BROADHEAD, BRIAN J	
			ART UNIT	PAPER NUMBER	
• • • • • • • • • • • • • • • • • • • •			3661		
			DATE MAIL ED: 05/09/2003	DATE MAIL ED: 05/09/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

			81		
		Application No.	Applicant(s)		
Office Action Summary		09/954,886	AMBERKAR ET AL.		
		Examiner	Art Unit		
		Brian J. Broadhead	3661		
TI Period for R	ne MAILING DATE of this communication eply	appears on the cover she t with the	ne correspondence address		
THE MAI  - Extensions after SIX (  - If the perion  - If NO perion  - Failure to  - Any reply I	TENED STATUTORY PERIOD FOR RE LING DATE OF THIS COMMUNICATION of time may be available under the provisions of 37 CFI 5) MONTHS from the mailing date of this communication of for reply specified above is less than thirty (30) days, and do for reply is specified above, the maximum statutory per reply within the set or extended period for reply will, by state of the maximum statutory per ectived by the Office later than three months after the maximum adjustment. See 37 CFR 1.704(b).	ON. R 1.136(a). In no event, however, may a reply b t. reply within the statutory minimum of thirty (30) riod will apply and will expire SIX (6) MONTHS tatute, cause the application to become ABAND	pe timely filed  ) days will be considered timely.  from the mailing date of this communication.  ONED (35 U.S.C. § 133).		
1)⊠ R€	esponsive to communication(s) filed on	<u>05 April 2002</u> .			
2a)□ Th	is action is <b>FINAL</b> . 2b)⊠	This action is non-final.			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims					
4)⊠ Cla	im(s) <u>1-34</u> is/are pending in the applica	ation.			
4a)	Of the above claim(s) is/are with	drawn from consideration.			
	im(s) is/are allowed.				
6)⊠ Claim(s) <u>1-6,8-11,20,23-28 and 30-34</u> is/are rejected.					
_	im(s) <u>7,13-19,21,22 and 29</u> is/are objec				
8) <u></u> Cla	im(s) are subject to restriction ar	nd/or election requirement.			
Application	Papers				
9)□ The	specification is objected to by the Exam	niner.			
10)⊠ The	drawing(s) filed on 19 March 2002 is/ar	re: a)□ accepted or b)⊠ objected to	by the Examiner.		
-	oplicant may not request that any objection t	***	• •		
11)∐ The	proposed drawing correction filed on _	is: a)□ approved b)□ disar	oproved by the Examiner.		
	approved, corrected drawings are required in	• •			
•	oath or declaration is objected to by the	e Examiner.			
Priority unde	er 35 U.S.C. §§ 119 and 120				
13) <u></u> Acl	nowledgment is made of a claim for for	eign priority under 35 U.S.C. § 11	9(a)-(d) or (f).		
a)∏ A	ll b)☐ Some * c)☐ None of:				
1.[	Certified copies of the priority docum	nents have been received.			
2.	Certified copies of the priority docum	nents have been received in Appli	cation No		
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
	owledgment is made of a claim for dom	•			
	The translation of the foreign language nowledgment is made of a claim for dom	• •			
Attachment(s)	•	, , ,00			
2) Notice of I	References Cited (PTO-892) Draftsperson's Patent Drawing Review (PTO-948) n Disclosure Statement(s) (PTO-1449) Paper No(	5) Notice of Inform	mary (PTO-413) Paper No(s) mal Patent Application (PTO-152)		

U.S. Patent and Trademark Office PTO-326 (Rev. 04-01)

Art Unit: 3661

### **DETAILED ACTION**

### Inventorship

1. In view of the papers filed on 4/5/02, it has been found that this nonprovisional application, as filed, through error and without deceptive intent, improperly set forth the inventorship, and accordingly, this application has been corrected in compliance with 37 CFR 1.48(a). The inventorship of this application has been changed by adding William Chin-Woei Lin, Weinwen Deng, and Yuen-Kwok Chin, as inventors.

The application will be forwarded to the Office of Initial Patent Examination (OIPE) for issuance of a corrected filing receipt, and correction of the file jacket and PTO PALM data to reflect the inventorship as corrected.

### **Drawings**

1. New corrected drawings are required in this application because the graphs are of such poor quality that you cannot distinguish the different lines. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3661

3. Claims 1-6, 8-11, 20, 23-28, and 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Schaffer, 5048630.

- 4. As per claims 1, 2, 3, 4,12, 20, 23, 24, 25, and 26, Schaffer discloses a torque assist function responsive to a signal indicative of an input device torque for providing a torque-assisting command to a motor on column 3; a steering-pull compensator responsive to a signal indicative of a valid detection cycle for modifying said torque assist command to the motor by an offset corresponding to a detected steering condition on lines 59-63, on column 3; at least one summing function in signal communication with said torque assist function and with said steering-pull compensator for summing the provided torque assist command with the offset corresponding to a detected input device pull-condition on lines 36-41, on column 9; a filter responsive to the signal indicative of input device torque on lines 27-32, on column 9; and a condition processing block for determining if the vehicle is being driven in substantially straight path on lines 42-45, on column 9.
- 5. As per claims 5, 6, 8, 9, 10, 11, 27, 28, 30, 31, 32, and 33, Schaffer discloses an enable block for validating the detected steering-pull condition on lines 42-45, on column 9; an enable switch for receiving a binary control signal from the enable block in figure 6; a memory switch for receiving its own signal at its primary input terminal in figure 6; a function block for providing a signal to a non-inverting input of the summing function in figure 6.

Claim Rejections - 35 USC § 103

Art Unit: 3661

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffer, 5048630, in view of Howard, 6272947.
- 8. Schaffer discloses the limitations as set forth above. Schaffer does not disclose the motor is electric. Howard teaches the motor is electric on lines 22-25, on column 15. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the electric motor of Howard in the invention of Schaffer because such modification would prevent drift or steering pull in a vehicle that uses an electric motor to control steering assist.

### Allowable Subject Matter

- 9. Claims 7, 29, 13-19, 21, and 22 being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 10. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not disclose a function block for preventing an offset correction corresponding to a detected steering-pull condition from exceeding a desired value; and determining whether at least one of the duration of the monitored ignition signal exceeds a threshold duration value and the distance traveled by vehicle exceeds a threshold distance value.

Art Unit: 3661

### Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- 12. Miller et al., 5941338, disclose vehicle steering correction system.
- 13. Poshadio, 6250421, discloses a power-assisted steering system and method with compensation of pull induced by tire pressure loss.
- 14. Beebe et al., 5309373, disclose apparatus and method for wind-corrected measurement of steering pull on a vehicle.
- 15. Howard, 6520520, discloses a steering stabilizer with trimming accumulator.
- 16. Howard, 5527053, discloses a detent centering compensator for vehicle steering systems.
- 17. Miller et al., EP 0822130 A1, disclose vehicle steering correction system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Broadhead whose telephone number is 703-308-9033. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A. Cuchlinski can be reached on 703-308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Art Unit: 3661

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

BJB May 2, 2003 WILLIAM A. CUCHLINSKI, JR. SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600